Fermilab

Title: CDF detector simulation framework and simulation performance

The CDF detector simulation framework is integrated into a AC++ application used to process events in the CDF experiment. The simulation framework is based on the GEANT3 package. It holds the detector element geometry descriptions, allows to configure digitizers at run-time and manages the generated data. The design is based on generic programming which allows to extent easily the simulation framework. The overall design, details of specific detector components and in particular the performance of the CDF simulation compared to collider data are described.

- Elena Gerchtein, Carnegie Mellon University